



Unworlded After-Picture: The New State of Being in the Virtual Cosmos

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Abstract

In 1938, Heidegger christened his era “the age of the world picture,” evoking the human capacity to represent a meaningful existence through authentic social engagement and care for shared surroundings. There have been various “world pictures” throughout history, each a response to popular media produced by the latest technology. From papyrus to print, alphabetic writing has long supported literature as the dominant medium. Now, the development of digital, virtual, and network technology is dethroning this tradition and reshaping the world picture established through text. Brian Rotman notes that habituation to new technologies is restructuring the brain’s cognitive architecture, resulting in unpredicted consequences on thought, activity, and selfhood. The private, self-contained, alphabetic “I” is splintering into the porous, pluralistic, public agent that Rotman calls *para-self*. Accessible and available at all times, adept at navigating the invisible pathways of global cyberspace, simultaneously “present” at numerous “sites,” crisscrossed by networks of other selves and simulacra of itself through an ongoing stream of spontaneous information, this *para-self* does indeed present a picture of the world that corresponds to the technology used to build it, digitization. The question is, to what extent can this digital imaginary sustain the “world picture” heralded by Heidegger as a participatory and conscientious unity of Being-in-the-world?

Keywords: *World Picture, Unworlding, Dasein, Subiectum, Para-self, Cognition, Subjectivity, Digitization, Network Media, Virtual Technology, Martin Heidegger, Brian Rotman*

In his 1938 essay, Martin Heidegger christens modernity as “the Age of the World Picture”¹ to account for the historical circumstances that enable mankind’s experience of its socio-cultural environment as a singular, cohesive, meaningful construction. He goes on to explain that the term “world picture” signifies the understanding of the relationships that scaffold one’s own being in the world. Throughout history there have been many “world pictures” that have confronted and configured human culture. The world picture is a product of the media of its time, and therefore depends on contemporary technology. For millennia, literature, determined by the technology of writing (from papyrus scrolls to electronic print), has been the dominant media of representation. (Other arts, such as painting, sculpture, and music, also enable a world picture, but, being nonverbal, have been less readily accessible and explicitly comprehensible to most people.) In the twenty-first century, however, innovative technologies and their resulting media are dethroning the literary tradition, as well as the arts in general. The transition to digital and network media is changing the world picture we have come to know through our historical experience of a text. Not only does habitual use of these new technologies restructure the neurological architecture of the human brain, it also transforms the essence of human subjectivity by troubling the boundary between self and other. This paper engages with the Heideggerian notion of the modern “world picture” as a platform for discussing the consequences of current information technology as it leads us into the age of post-literacy and after-imaging. It posits that such a future will undermine our ability to exist in conscientious unity with other human beings as part of a sensible, meaningful world.

Key to Heidegger’s analysis of the world picture are his reflections on man’s ability to make sense of being in a world among other things, which he elaborates in his work *Being and Time*.² Heidegger uses the term *Dasein* (literally translated as ‘Being-there’) to express our original existential state of Being-in-the-world. *Dasein* is a mode of being that is aware of itself and of others present alongside itself as a “unitary phenomenon” (78; italics in original). Described as an “entity which in each case I myself am” on the condition of [my] ability to “‘dwell alongside’ the world, as that which is familiar to me” (78, 80), *Dasein* entails a sense of belonging that presupposes an ontological relationship to the world in terms of time and space. In thus recognizing that relationality substantiates its very being, existent *Dasein* knows to prioritize the world over itself. Heidegger explains that

¹This paper refers to the first half of the twentieth century as “modernity” or the “modern age” as per Heidegger’s determination. All subsequent uses of “modern” will refer to this time period.

²First published as *Sein und Zeit* in 1927.

“Being-in-the-world, as concern, is *fascinated* by the world with which it is concerned” (88) in such a way that does not consider its usefulness, or how it can be manipulated to achieve one’s own selfish needs. The concern expressed by Being-in-the-world is articulated in Dasein as the activity of care (*Sorge*).

Heidegger’s discussion of Being-in-the-world as the “basic state” of Dasein (90) provokes his investigation of the ontology and phenomenology of the world. Since Being-in-the-world presumes the structure of a pre-existing, surrounding world (*Umwelt*), “world” can be considered a “characteristic” of Dasein. Heidegger’s first assessment of the word “world” emphasizes its facticity: “‘World’ is used as an ontical concept, and signifies the totality of those entities which can be present-at-hand within the world” (93). In relation to the ontological concept of Dasein, “world” is the theoretical dwelling³ which comprises those that are *not*-Dasein as well as Dasein itself. It may designate the “‘public’ we-world, or one’s ‘own’ closest [...] environment” (93). Our ability to represent and apprehend the phenomenon of the world is a property of Dasein. Thus Being-in-the-world incorporates both common and subjective conceptions within the ontological structure of the world; it is a gesture of taking-care (*Besorgen*). Heidegger concludes that the world is held together by temporality; that the world containing all beings is prior to their interactions—that is, prior to all subject and object relations—and also makes them possible which implies that time is the *a priori* condition of care, and therefore of Dasein itself. Dasein’s openness to time enables it to understand the past in the present and thereby project itself into the future in such a way that is authentic and true.

Heidegger draws from this analysis of Being and world in “The Age of the World Picture.”⁴ He begins by clarifying the meaning of “world picture.” In this case, his definition of “world” is rather straightforward: “the world itself, the world as such, what is, in its entirety” (Age 129). To the word “picture” he devotes a more complex explanation:

“Picture” here does not mean some imitation, but rather what sounds forth in the colloquial expression, “We get the picture” [literally, we are in the picture] concerning something. This means the matter stands before us exactly as it stands with it for us. “To get the picture” [literally, to put oneself into the picture] with respect to something means to set whatever is, itself, in

³Heidegger uses the concept of *dwelling* to explain how Dasein occupies the world: not simply by inhabiting its space, but also by being familiar and earnestly involved with it.

⁴Hereafter, “The Age of the World Picture” will be referred to as *Age*.

place before oneself just in the way that it stands with it, and to have it fixedly before oneself as set up in this way.[...] Hence world picture, when understood essentially, does not mean a picture of the world but the world conceived and grasped as a picture. (129)

The world picture is not an absolute value but a subjective interpretation of an objective reality determined by that particular “entity” considered as a world. Heidegger concludes that this representation of the world conveys the “Being of whatever is” (130), an assessment that recalls his earlier claims regarding the essence of Being-there, or Dasein.

Heidegger asserts that the modern age (*der Neuzeit*) is unique in its ability to set forth the world as a picture because its existential conditions enable man to rise to the position of subject. In the history of Western civilization, guided by Greek philosophy and Christian theology, true subjectivism has been previously denied to mankind. According to Greek sophism, this is because of the fundamental tension underlying its understanding of Being as presencing (*hypokeisthai*) and truth as unconcealment (*aletheia*).⁵ Similarly, medieval Christendom⁶ precludes further investigation into the nature of the world and Being as anything more than objects of God’s Creation. Of his own era, Heidegger staunchly declares: “But it remains certain that no age before this one has produced a comparable objectivism and that in no age before this has the non-individual, in the form of the collective, come to acceptance as having worth” (128).

Heidegger then identifies several modern metaphysical phenomena that allow for the “liberation of man” (128) through the emphasis on individualism and subjectivism. Of these, he declares

⁵Heidegger ascertains that “Greek man *is* the one who apprehends (*der Vernehmer*) that which is, and this is why in the age of the Greeks the world cannot become a picture” (*Age* 131). He elaborates this metaphysical position in Appendix 8 to this essay: “Through man’s being limited to that which, at any particular time, is unconcealed, there is given to him the measure that always confines a self to this or that. Man does not, from out of some detached I-ness, set for the measure to which everything that is, in its Being, must accommodate itself. Man who possesses the Greeks’ fundamental relationship to that which is and to its unconcealment is *metron* (measure [*Mass*]) in that he accepts restriction (*Mässigung*) to the horizon of unconcealment that is limited after the manner of the I; and consequently acknowledges the concealedness of what is and the insusceptibility of the latter’s presencing or absenting to any decision, and to a like degree acknowledges the insusceptibility to decision of the visible aspect of that which endures as presence” (145–146). This tension between the man that presences (*metron*) and the unconcealedness of that horizon from which the man presences ascertains that man can never be *subiectum*. In a later argument, this paper reiterates Heidegger’s distinction between apprehension (Greek) and representation (modern).

⁶Christendom imposes a world view based on Christian doctrine (*Age* 117).

science to be the most important and machine technology to be its greatest contribution: “Machine technology remains up to now the most visible outgrowth of the essence of modern technology, which is identical with the essence of modern metaphysics” (116). Specifically, scientific activity toward the development of machine technology is what allows man to assume subjectivity through the effort to “get the picture” as well as to participate in that picture. Furthermore, science that respectfully explores or directly benefits the world around us can be considered an act of concern or of care, respectively. Under these circumstances, science may impress a world picture constellated as a meaningful arrangement about one’s own resolute being.

However, Heidegger reveals his own concerns about the possibility—or rather, probability—that modern science will destabilize the world in its entirety. He begins by contending that “science” is quite different from the medieval terms *doctrina* and *scientia* and from the Greek *episteme*. While earlier notions of science imply exact knowledge of the natural world, modern science concerns “research,” which requires a procedure and experiment to procure results that do not convey absolute Truth. Heidegger describes research as an “ongoing activity” (124) that continually reimagines its environment: “Research must represent [*vorstellen*] the changeable to the changing” (120). The results of any research are not fixed but may be considered the premise for more research, perhaps a new experiment that will draw different conclusions. In sum, research amounts to provisional truths that can assist our understanding of a world that we can never know absolutely.

Heidegger believes that science as research not only enforces individualism but also reconfigures human subjectivity through the “necessary interplay” and “reciprocal conditioning” of subject and object within a system (128). He explains that to know something through research is to be able to represent it so that it may be pondered, calculated, measured, and even manipulated. By objectifying the subject of research, the researcher him/herself becomes the subject. Since the researcher is anterior to the present activity and scope of the research, he/she becomes not just the subject but *subiectum*,⁷ a translation of the Greek *hypokeimenon*, meaning “that-which-lies-before, which, as ground, gathers everything onto itself” (128). Heidegger specifies that *subiectum* is not the same thing as “man” or “I”/*ego*. Rather, *subiectum* indicates that man becomes the relational center of all things he perceives. The sum of the meaningful connections in which we exist with others is how we understand “world.”

⁷Since Heidegger maintains the italicization of *subiectum* and returns to normal font for Dasein, the same has been followed here.

Subiectum is capable of representing the world as a picture through the following temporal process. The world is a system existing before the self and the things within it; it subsequently belongs and testifies to their existence. In contradistinction to the act of apprehension,⁸ representation of the world (by modern metaphysics) means that the subject brings before itself what is already present, and subsequently considers in alternative ways: first as “something standing over against,” then as something relating to itself, and finally as inexorably drawn into itself in circumscribing a “normative realm” or world (131). This process of “getting the picture” enables the representing subject to realize its difference and relation to the things that constitute the world and thereby re-enter the world in which the world and itself are now represented: “Man becomes the representative [*der Repräsentant*] of that which is, in the sense of that which has the character of object” (132). When the representing subject becomes the representative of the object, it “gain[s] mastery over that which is as a whole” (132) and thereby transcends both subject and object to the state of *subiectum*. Therefore, the representation of the world as a picture aligns with the transformation of man into *subiectum*.

Heidegger seems to contradict himself when he implies the historicity of this process, and subsequently asserts that only the modern age allows for the world to become a picture: “The fact that whatever is comes into being in and through representedness transforms the age in which this occurs into a new age in contrast with the preceding one” (130); then “[t]he world picture does not change from an earlier medieval one into a modern one, but rather the fact that the world becomes a picture at all is what distinguishes the essence of the modern age” (130). These statements can be interpreted to mean that humans have always developed technology and experienced media that allow for the incarnation of *subiectum*. Heidegger suggests that these events comprise the influence of humanism, that is, the evolution of Greek thought through Plato and Aristotle, who defied sophism (143). Earlier in his essay, Heidegger proposes modern art as another vehicle for this process, being that it occupies the aesthetic realm as an “object of mere subjective experience,” and as such becomes “an expression of human life” (116). What is notable about the modern age is that representedness becomes the essence of so many aspects of civilization that the average human necessarily assumes the phenomenon of a world picture.

⁸Despite his appropriation of the Greek term, Heidegger clarifies that in Greek sophism man can never be *subiectum* because the action of man as subject is apprehension: he himself presences toward what appears. Therefore, to consider Greek man as a representing subject actually moves into the realm of the *imagination* as he “fantasizes,” or brings forth an objective image of whatever is into the world as picture (paraphrased, 147).

With regards to science as research, the connection between *subiectum* and Heidegger's earlier discussion of Being-in-the-world is implicit. The fascination and concern that Being-in-the-world exhibits toward its surroundings is comparable to the curiosity and purposefulness often motivating research. Undeniably, research-science has bettered our world in many ways by finding solutions to problems and innovating improvements to our way of living in the world. In these circumstances, research-science is operating as care, and thus can be considered a projection of Dasein. Heidegger notes that this requires of the scientist a selfless attitude and motives, and of scientific institutions a willingness to establish an "internal unity with other like activities that is commensurate with themselves" (126). In sum, science must guard a certain self-awareness and earnest cooperation with the world in which it participates: "But the more unconditionally science and the man of research take seriously the modern form of their essence, the more unequivocally and the more immediately will they be able to offer themselves for the common good, and the more unreservedly too will they have to return to the public anonymity of all work useful to society" (126). The scientist who works to bring forth a world of togetherness (that is, to change the world into a better environment for all entities within it) inhabits the position of *subiectum*, which is none other than the mediation of Dasein. Their work—a world picture—is therefore a meaningful expression of care.

However, Heidegger also notes that the expansive tendency of science and the calculative character of research threaten the integrity of the world picture as such. He remarks that the essential nature of *subiectum* is to reject the individualism that informs its subjective existence while embracing the communalism that certifies its objectiveness within the world it creates. He warns against the tyranny that may develop through the event of *subiectum* in the sciences and elsewhere:

Namely, the more extensively and the more effectually the world stands at man's disposal as conquered, and the more objectively the object appears, all the more subjectively, i.e., the more importunately, does the *subiectum* rise up, and all the more impetuously, too, do observation and teaching about the world change into a doctrine of man, into anthropology. (133)

Such is the narrative of unworlding (*Entweltlichung*): the world overcomes that Being who first presented it, who no longer feels co-belonging to the world, but that the world belongs to It as no more than an objective presence. When science approaches nature with the purpose of consuming, manipulating, and even destroying, human beings experience the surrounding world as useful and are thus

characterized as *worldly*. In such circumstances, the symbiosis of subjectivism and objectivism has been shattered, as the activity of the representing *subiectum* morphoses from care to insouciant self-interest.

In his 2016 essay “What is a World?” Pheng Cheah situates Heidegger’s account of the world alongside the deconstructionist and phenomenological interpretations of Hannah Arendt and Jacques Derrida. In revisiting these earlier theorists, Cheah concludes that the world is constituted by inter-subjective relationships and assesses the ethicopolitical consequences of ‘loss’ of world. He also reiterates their shared concern about the world-destructive power of globalization, as a capitalist venture motivated by the “instrumental and calculative reduction of existence,” as well as their faith in the world-forming power of literature:

Because the unification of the world as a meaningful whole is associated with practices of collective existence, a principle of real hope persists and is structurally inscribed in the very processes of global modernity that repeatedly threaten the world with annihilation. ‘Literature’ discloses and enacts this unerasable promise of the opening of other worlds. (Cheah 97)

Unlike global capitalism, literature⁹ is capable of creating the cosmopolitan and spiritual unity of the world. In reading literature not only do we imagine a world (aesthetically figured) but we also feel a sense of belonging to a community. Cheah bestows upon literature the same beneficial qualities that Heidegger praises in poetry.¹⁰ In earlier writings, Heidegger argues that poetry is the best antidote to unworlding because it induces “nonthematic discourse,”¹¹ which brings human beings together: “Poetry [*Dichtung*], is nothing but the elementary coming into words, the becoming-uncovered, of existence as being-in-the-world. For the others who before it were blind, the world first becomes visible by what is thus spoken” (qtd. in Cheah 126).¹² As a combination of the spiritual subjective and the material objective—

⁹Cheah values the world-forming potential of all literature but specifies that the category of world literature may be the most effective. In fact, the term “world literature” often refers to the totality of national literatures. To avoid a discussion on the exact definition of “world literature,” this paper addresses “literature” in general.

¹⁰Cheah notes that Heidegger’s emphasis on poetry occurs in earlier writings. Heidegger later broadens his perspective to include the arts in general.

¹¹Heidegger’s emphasis on discourse as the defining characteristic of humanity derives from his interpretation of Aristotle’s description of man as *zoon logon echon*. Accordingly, Heidegger understands *logos* as the ability to talk discursively (Cheah 127).

¹²This excerpt is from Heidegger’s commentary on Rilke’s *Aufzeichnungen des Malte Laurids Brigge*, located in *Basic Problems of Phenomenology*, trans. Albert Hofstadter, rev. ed., Indiana University Press, 1988, pp.171–72; 244, (translation modified).

though neither exclusively—poetry is ontologically compatible with the notion of world.¹³ In reading poetry, we uncover possibilities of meaning that challenge our understanding, that is, we empower worlds to become visible.

Importantly, Cheah draws from Heidegger's analysis of world as a "'force' of opening or entry" grounded in temporality, which upholds our existence as Dasein, in order to show that literature, and poetry in particular, is likewise capable of setting "resolute authentic action in relations with others that can help us overcome the worldlessness of modernity" (96). This is due to the recursive nature of language itself.¹⁴ Language is a symbolic system in which meanings are assigned to sounds (spoken)/symbols (written) and then sounds spoken or words written are associated with meanings by the addressee. The foundation of language is discourse, making it a temporal medium that enjoins a "circle of understandability as parts of a whole that necessarily belong to each other" (127). It follows that the symbolic structure of language is in fact a world itself, one that, through discourse, weaves together meanings and the human life that understands these meanings. Participating in language and discourse is effectively Being-in-the-world. The quality of this existence is elevated by encountering a work of art. Cheah summarizes Heidegger's ideas about poetry and art and extends them to literature in general: "By virtue of its being a process of coming-into-being, the work of art is ontologically the same as the process of worlding. It is worlding to a second degree. It exemplifies worlding by making worlding its structure [...] it brings the earth into the opening that is world and maintains this opening" (129). In terms of his own concern about global capitalism, Cheah sees world literature as an essential force of worldliness that empowers possibilities for the future to counteract the demolition of possibilities encountered at every present moment in history. He concludes that world literature is a process of transcendence and restraint which, though unable to "cause or make anything," nonetheless "uncovers the world and opens up other worlds, thereby giving us resolve to respond to modernity's worldlessness and to remake the world according to newly disclosed possibilities" (129).¹⁵

¹³Kant elaborates on the same idea in his assertion that a sensibility of aesthetic pleasure develops "the universal feeling of participation" (qtd. in Cheah 44).

¹⁴Cheah here refers to *The Fundamental Concepts of Metaphysics*, a lecture course that Heidegger delivered at the University of Freiburg in the winter semester of 1929–1930.

¹⁵"Disclosure" or "unconcealedness" is central to the idea of truth (*aletheia*) in Ancient Greek philosophy. Heidegger returns to this notion regarding the opening up of presence (or of a world) which suggests a truthful reality.

Cheah's encomium to literature, based on the theories of his deconstructionist forebearers, resonates with Heidegger's explicit critique of modern technology as well as with the contemporary ideas of Brian Rotman. As a mathematician and cultural theorist, Rotman explores the semiotic systems that have perpetually redefined human history and reinscribed cultural consciousness through innovative technologies. In *Signifying Nothing: The Semiotics of Zero*, he describes how the introduction of the concept of zero during the Renaissance period inexorably altered the Western comprehension of subjectivity. Rotman relates three important changes that occurred in the coded systems of arithmetic, economic exchange, and perspective art that signify the creation of a zero-value meta-sign, "a sign-about-signs outside it [...] whose meaning arises outside these signs in a relation of origination to them" (13, 26). He notes the parallel function of the number zero, imaginary money, and the vanishing point in facilitating a system of infinitely many signs (numerals, pictures, transactions) in which it is conspicuously absent. These signs within the system are representations of an anterior reality for the active human subject-who-represents (by counting numbers, dealing with money, or viewing a picture). Therefore, the activity of representing is essentially a thought-experiment enabled by the agency of the meta-sign that also incarnates the virtual presence of a (human) meta-subject within the represented system.

Rotman's analysis corroborates Heidegger's explanation of the process of creating a world picture. The transformation from viewing subject to meta-subject recalls the subject becoming *subiectum* as the relational focus of the world picture it represents. Heidegger's world picture, like Rotman's mathematical, economic, and perspective systems can be deconstructed in the same manner: "What lies at its centre, explicit in the talk of 'prior' reality, is some supposed movement into signification, some shift from object to sign, from presentation to representation, from a primary given existence to a secondary manufactured description" (27). The picture of the system (world, money, math, or visual scene) is a "perfectly plausible original fiction" (27), an illusion that allows for the representation not only of supposed reality but also of any imaginable relationship among the things it contains. This picture is existent possibility, a description of reality as if it were external and anterior to itself, one that discloses a certain "world" for the subject that comes to life as the significant meta-subject within it. As Heidegger said of the *subiectum* incarnate: "This means: whatever is, is considered to be in being only to the degree and to the extent that it is taken into and referred back to this life, i.e., is lived out, and becomes life-experience" (Age 134). Similarly, Rotman explains that finance based on imaginary money, math based on numeral zero, and perspective drawing based on a vanishing point offer a virtual reality so

compelling that Western cultures have conformed themselves to the signage of these systems, which affect not only communities but also individual lives.

Rotman pursues his analysis of technological media and human subjectivity from the realm of numbers and images and into that of letters and words. In a later book, entitled *Becoming Beside Ourselves: The Alphabet, Ghosts, and Distributed Human Being*,¹⁶ he deconstructs alphabetic writing, the use of symbols to represent spoken language, which has been the West's primary cognitive technology for millennia. Like the codes of arithmetic, money, and painting, the alphabet is a semiotic system that has become embedded in the neural structure of the human brain. In the transition from gesture to speech to writing, the human body gradually dissolves from communication, which changes the way that humans-who-write conceive of themselves and their surroundings.

In the absencing of the body of the one-who-writes a virtual world unfolds. In this realm, texts are entities that exist without spatial, temporal, or cultural context; they can be reproduced anywhere and anyhow. Rotman claims that to engage with these texts posits a

[...] virtual user, an abstract reading/writing agency who or which is as distinct from any particular, embodied, and situated user as an algebraic variable is from the individual numbers substitutable for it, an agency who/which accommodates all possible readers and writers of texts regardless of how and when in space and time they have or might have appeared. This floating entity makes ideas of disembodied agency, action at a distance, and thought transference plausible. (*Becoming* 6–7)

This analysis compares to Heidegger's belief in poetry's ability to assemble a virtual human collective as a world picture. Through contact with the disembodied entities inherent to a text, any reader can channel their essential Dasein. As Cheah points out, there is a connection between the act of reading and care for the world. The activation of Dasein through fascination and concern with the virtual world contingent to a text elevates self-consciousness and consideration of the real world. We can learn to recognize and respect the integrity of others through our psychic participation in the text-mediated world picture.

The analyses of Rotman and Heidegger can be superimposed in demonstrating how literature reconfigures human subjectivity. Since reading and writing encourage entry into a world picture through empathetic engagement, it follows that the meta-subject of this literary

¹⁶Hereafter, *Becoming Beside Ourselves: The Alphabet, Ghosts, and Distributed Human Being* will be referred to as *Becoming*.

sign system, made explicit in the graphic word “I,” can be considered a direct address to the essential state of Being-in-the-world as Dasein. It follows that “I” entails the hypostatization of Dasein as *subiectum*, presiding over and participating in a system to give it meaning. However, unlike the spoken “I” with its intrinsic association to the human body, the written “I” is an invisible, indeterminate agent with infinite potential and enjoys absolute *authority* over the text. As the entification of the alphabet’s virtual user, it could exist at any time or place—it could be you or I or any one of us.

Rotman avers that habituation to the written “I” primes our acceptance of such abstract, disembodied agents as Mind, Psyche, God, Spirit, and Infinity which have governed Western metaphysical thought for millennia. Religions capitalize on this alphabetic function to instill beliefs in “I am that am” (Yahweh of the Hebrew Bible), the Greek *psyche* dwelling without body within the body, or Aristotle’s *nous* as the disembodied organ of reason.¹⁷ Just as Heidegger intimated the constant reinvention of the world picture throughout history, Rotman asserts that communicational media continually transform their environments and reinscribe human subjectivity within them. In the same way that the spoken language engenders a spoken “spirit” separate from the gesturing “I” of the body, written language confirms the hypostatization of that spirit as a transcendental agency. The question now is how do new information and communications technology affect the subjectivity of “I” and thus the relationship of the individual self to the world?

Rotman begins to confront this problem by examining the ways that current digital, virtual, and network technologies¹⁸ exact different cognitive activity from their users than does alphabetic writing.

¹⁷Note that Rotman’s assessment of Western religions does not include Christianity proper, and thus may accommodate Heidegger’s critique of medieval Christendom as oppressive to human individualism and subjectivity. Based on Rotman’s description of the virtual, disembodied subject, it can be argued that the Christian belief in the physical person of Jesus as one and the same as God and Holy Spirit removes the ambiguity of the inherited notion of Yahweh-I which allows for the projection of a meta-subject within lived Creation. Rather, Christianity (Catholicism in particular) emphasizes the Body of Jesus (as Christ) as proof of his humanity and (subject) agency. In the New Testament stories, Jesus is a subject with whom we as human readers are not meant to fully identify—that would be not only presumptive but also counter-intuitive to the project of Christian faith as salvation.

¹⁸The differences among these three is as follows: Digital media is the premise and interface of virtual and network technology. Network technology enables the transmission of digital information. Virtual technology immerses its user in the digital world, often using network resources. Earlier the paper argued that various forms of art are fundamentally virtual media. The difference between their virtual reality and that of the current age should soon become clear. Henceforth, the paper will refer to “virtual technology” as that which relies on digital and network media.

Drawing from scientific research, he cites several neurological alterations that reshape our cerebral pathways and psychic minds in accordance with new media. In particular, he emphasizes the shift from serial to parallel computation as the preferred strategy of approach to digital and network technologies. Serial and parallel are two opposing and interdependent modes that create and organize various cultural practices to give them meaning, significance, scope, and aesthetic value. The serial expresses sequence, temporality, linearity, and singularity. The parallel expresses co-presence, simultaneity, spatiality, and multiplicity. Examples of this duopoly occur in music (melody/harmony), symbols (text/image), language (syllable/phoneme), arithmetic (ordinal/cardinal numbers), and electrical circuits (serial/parallel). In any of these symbiotic systems, a change in one mode will affect the other to the same degree.

Rotman notes that new technologies, in the interest of saving time and expanding domain, increasingly privilege parallel processing to one-move-at-a-time calculation. This way they can divide and disperse data, memory, tasks, etc., among discrete, interconnected elements acting simultaneously (such as autonomous computers wired to the Internet, robotic mechanisms, cell phones, social media, and central processors). Many believe that the shift toward parallel computing is natural considering the globalized world in which we now live. Rotman concedes the possible benefits of this transition which "[...] amounts to the belated recognition of the presence of collectivities at sites long, deeply, and mistakenly held to be the province of individual, serially thinking subjects" (*Becoming* 90). In that case, if the age of slow-mo, serially-scripted, alphabetic "technology" produced a single-minded monadic Being, then the current age of high-speed, far-reaching, ever-present digital, network, and virtual technologies will produce a distributed, interconnected, plural-minded Being-in-the-world. According to Rotman's argument, the frequent use of digital media and virtual technology should be capable of transforming the human brain to make it more compatible to the conditions of multiculturalism, democracy, and equality.

Instead, the transition to parallel computation at the expense of the serial has a drastic effect on human thought, activity, and notions of selfhood. Rotman describes it as follows:

Whether through cell phones interchanging private and public spaces, through the plurally fractured linearity of so-called multi-tasking; through the manipulation of external avatars of the self in communally played computer games; through engaging in the multifarious distributions of agency, intelligence, and presence that immersion in networked circuits

put into play; or through the still unfolding capacity to be in virtual contact anywhere, at any time, with unknown human or machinic forms of agency – these computational affordances make the who, the what, and the how of the parallelist self radically different from its alphabetic predecessor. (*Becoming* 92)

The “lettered self” of alphabetic writing has been invaded, fractured, de-privatized, and dissolved by the apparatuses of parallelism, and with it dies the potential meta-subject. There is no longer a psychic foundation for the “I” who writes, speaks, and acts in the world. Rather, that “I” leaks out into the collective that permeates its borders. The individual soul, once private and contained, disperses into the public realm, becoming social, or one can say, global. Rotman refers to this ontological phenomenon as the *para-self*, “a parallelist extension of the ‘I’ of alphabetic literacy that is crystallizing around us” (133). Within this exogeneous entity, the internal and the external fold into each other, becoming a field crisscrossed by networks of other selves and simulacra of itself through an ongoing stream of spontaneous information. The single-bodied subject and the world around it are not only one but many, changing the way we consider others and ourselves: “By distributing an individual linear consciousness, a monadic thinking self, over a collectivity, its action both pluralizes the alphabetic ‘I’ behind this consciousness and correspondingly reconfigures the social multiplicity, the ‘they/we’ against which it is defined” (134).

Furthermore, the dissolution of the lettered psyche predicates the decline of faith in the old monadic ideas that have dominated Western culture: the Jewish ‘I’ (God, Yahweh, “I am that am”), the Greek “I” (Psyche), and even the Infinite Mathematical Agent. Rotman contends that any religion or principle that authorizes itself by means of an alphabetic text is threatened by the incarnation of this most recent ubiquitous agency. The downfall of these fundamental principles recalls Heidegger’s analysis of modern metaphysics, where the “loss of the gods” entails not only the dismantling of the Christian world view but also the state of uncertainty about any god(s) or higher being. As humans abandon religion, they turn to history and psychology to explain the persistent mysteries of the world. Rotman observes the current resurgence of religious fundamentalism, such as “Bible-obsessed evangelism” and “Jewish and Koreanic literalism,” which he interprets as an intuitive defense of a writing-based God and the Creation engendered and enclosed by holy books. Though such groups may not consciously associate the increase in societal secularism and individual heathenism with the rise in digital, virtual, and network technologies, it is probable that the general skepticism and even indifference toward sacred texts has spurred such a fierce response.

While Rotman passes no judgment on the state of a society of *para-humans* who have replaced organized religion and even personal spirituality with psychic porosity, he is concerned about the extent to which we are in control of our own metamorphosis. It seems that we are becoming *para* not by conscious choice but by adaptive convenience. Is the network and virtual media of the digital age doggedly pressuring us into situations of distributed co-presence that will produce unknowable consequences within the sacred space of cognition? Moreover, do we want to change who we are, or were, or thought we should be in the age of the alphabet, the holy books it created, and the God it engendered? He concludes:

A technologically mediated transformation of the ‘human’ – global, all encompassing, and seemingly inescapable – is being made by us to happen [...] We are living through tumultuous, dizzying times on the cusp of a new era; times spanning a seismic jump in the matrix of human culture, which looks to be as momentous, epoch-making, and far reaching in its consequences as the invention of alphabetic writing. (*Becoming* 105)

Our subjectivity is critically at risk, not only in the proliferation of the para-self but also in the disempowering of the para-human.

It is not only religious texts and practices that may be jeopardized by the contemporary technocracy, but books as academic resources as well. Comparative Literature scholar Haun Saussy is skeptical about the current “age of information” (that is, the early 2000s) and believes that it threatens the state of literary scholarship, particularly in his own discipline. In our high-speed, inter-connected society, the abundance of information tends toward meaninglessness. While any query is searchable in cyberspace, the quality of these “results” is questionable, mostly because of the character of the “research” used to procure them. First, one can never be sure of the truth of anything read online. Second, the ease and efficiency of the process leaves little space for intellectual and emotional reflection. Third, it takes connectivity for granted. Rather than forging thoughtful connections based on carefully collected data, the modern Internet scholar is likely to fall under the tyranny of the omnipotent search engine that flattens the world to ultimate abjection: all objects available, comparable, useful: “The idea that a wider context will take care of hermeneutic problems, which is the assumption at the base of Google-mancy, takes for granted that text and context are co-present, ‘really,’ in some precritical fashion, a move that allows for a positivistic style of reading” (Saussy 33). Literary criticism, and Comparative Literature in particular, depend on an openness to interdisciplinary discourse and methods, as well as an

accurate understanding of the interpretive pathways that bring them to light and a continual awareness of the real, global conditions that make them relevant. The overly-simplified world of computer research, offering a given range of algorithmically-certified “results,” presents alternative conditions to understanding real-world issues, and thus cannot be expected to present the most thorough investigation thereof. Certainly, scholars may avail themselves to use the Internet as a tool, but should not expect its calibrated information to count for Truth, nor for this new form of research-science to optimize our ability to know the world around us.

It is tempting to equate the splintered subjectivity of the para-self to an existence of Being-in-the-world, but connecting through digital, network media is not the same as Dasein’s activity. While this may hold in some circumstances, it is not necessarily true for several reasons. The first is an echo of Rotman’s concern about the intentionality of our *para* transformation. In *Being and Time*,¹⁹ Heidegger stipulates that Being-in-the-world is not guaranteed by co-habitation or spatial proximity to others: “This state of Being [Dasein] does not arise just because some other entity is present-at-hand outside of Dasein and meets up with it. Such an entity can ‘meet up with’ Dasein only in so far as it can, of its own accord, show itself within a *world*” (84; italics in original). Network media assumes that all entities are consistently “present-at-hand” and can be “met-up-with” at any time, not necessarily “of [their] own accord.” For this same reason, being “present” within network media cannot sustain the creation of a world picture: “Wherever we have a world picture, an essential decision is made regarding what is, in its entirety. The Being of whatever is, is sought and found in the representedness of the latter” (*Age* 130). Although the para-self that is “found” through the multi-tendrilled, protean realm of cyberspace seems to reflect this quality of “representedness,” the activity lacks the deliberation required for making a world picture. To create and then put oneself in a picture of the world is not only a conscious decision, but also one that requires courage and continual maintenance for the survival of Being.

Furthermore, the essential nature of the para-self—multiple, uncontained, undefined—is incompatible with world-forming because it cannot attain the condition of *subiectum*. It is true that *subiectum* subsumes both subject and object(s), but crucial to this state of transcendence is awareness of the relationships that define its being. Heidegger clarifies that for man to reach *subiectum* is a matter of active reflection about his own Being and the world around him: “This is possible only when the comprehension of what is as a whole changes”

¹⁹Hereafter, *Being and Time* will be referred to as *Being*.

(*Age* 128). On the other hand, the para-self is unable to differentiate between itself and others and therefore cannot accurately describe their relationship. It cannot propose a picture, or form a world, of the virtual landscape. Even if it could, the elements of the picture—other para-selves and para-things—would be so completely collective and not-themselves they could not provide any ontological understanding.

Rather, the para-self collectivity associated with the “world” of network media seems to exemplify Heidegger’s description of Being-with-one-another:

And it is precisely these [...] deficient and Indifferent modes that characterize everyday, average Being-with-one-another. These modes of Being show again the characteristics of inconspicuousness and obviousness which belong just as much to the everyday Dasein-with of Others within-the-world as to the readiness-to-hand of the equipment with which one is daily concerned. (*Being* 158)

With e-mail, text message, phone calling, and even video chat, communicating with others is so easy and efficient that it risks becoming careless. New modes of “discourse” are being invented regularly, which suggests at least some level of awareness of its lack (or lack of meaning) in contemporary society. Moreover, each one of us is enveloped in a plethora of accounts—for socializing, banking, dating, gaming, exercising, etc.—that typically include profiles, inboxes, “histories,” and, with algorithmic assistance, our tendencies concerning at least one aspect of our personhood. Without having to devote conscious participation to the micro-community associated with each given account, we are continuously “active” therein—“present” for anyone who wants to view, message, or “like” that sliver of who we are. This situation is made all the more possible by the fact that we live in increasingly close proximity to the technological devices that make this Being-with-one-another possible; wireless earbuds, fitbits, and iphones nestled in a breast pocket are but a few examples of this endosymbiotic process converging our bodies with foreign matter.

The third reason relates to the reason we set up virtual accounts and purchase expensive technological equipment in the first place: it is useful. Modern technology and media encourage us to see things as handy, practical, and even profitable. Whether we are wielding a handheld or scavenging the virtual entities of cyber world, our purpose is to acquire and possess. Heidegger specifies that Dasein is a “mode of dwelling autonomously alongside entities within-the-world” on the condition of “holding-oneself-back from any manipulation or utilization” (89). Any notion of care for the world, which is the activity of Dasein, can only be genuine if it entails a willful refusal of

objectifying other people and things for personal “use” (unworlding). *Using* technology obviates the necessary circumstances for the authentic activity of care because the purpose of technology is to be useful to human life. Furthermore, the effect of digitization and virtual media, tools in and of themselves, is the representation of data as objects to be used. Cell phones, computers, and other technological devices are a means of summoning other people and things, forcing them to be present-at-hand rather than allowing for their own, discrete existences alongside us within the same world.

Finally, the virtual condition of the network community implicates the physical non-interaction of those participating. The virtual “I” is incapable of engaging with the virtual “them,” so neither party can ever truly know the other. Heidegger claims that although Dasein requires time alone for personal reflection, it is only fulfilled by actual interaction: “Dasein’s authentic self-relation is not a withdrawal from the world. The resoluteness of authentic existence involves actual commitments in the world and acting with concrete others to ‘actualize’ the original ontological community structured to Dasein’s selfhood” (Cheah 125). It is true that the virtual-written “I” engendered by the alphabetic system posits a virtual reader just as unknowable as the technology user. However, it is because of the fractional and porous *para*-nature of virtual-tech entities that the interface of network media is unable to frame a conclusive world picture for the real-life human users. This argument does not deny the ability of the para-self to create a picture of the world, but it is nothing like the one that Heidegger describes as a product of *subiectum*. The world picture for the para-self corresponds to the advanced technology that was used to build it: the digital picture. Any digital representation, be it of an object, document, image, or sound, entails its conversion to discrete, discontinuous units (usually numbers or letters). Human history has known many digital systems, including our DNA genetic code, the abacus, Morse code, Braille, and even alphabetic writing. With the invention of computers and telecommunication, digitization has become standard practice because it allows for information of any kind to be stored and transmitted. The “pictures” we are accustomed to seeing today are part of the digital revolution.

In 1968, Philips Labs of New York invented the prototype of the digital camera. This device called the “All Solid State Radiation Imager” recorded an optical scene as an arrangement of photodiodes on a matrix. In 1975, Steven Sasson of Kodak produced the first digital camera, which took twenty three seconds to capture a scene in 100 x 100 pixels and could store up to thirty black-and-white images on a cassette tape. The ubiquitous digital photographs of today are essentially numerical compositions produced by photoelectric and mechanical

techniques using a computer or camera. In the year 1938, Heidegger could only refer to photographs made by wet bath chemical process, which requires a human agent.²⁰ Certainly, humans are sometimes responsible for the editing of digital images, but they do not execute the initial capture of the image. The difference between our contemporary understanding of a picture is crucial, for it correlates to the way that virtual technology and network media alter the subjective consciousness of the previously photographic/alphabetic/perspective self. Written texts, perspective art, and photography allow for the hypostatization of the *subiectum* with a corresponding virtual subject “I” directing the narrative or vanishing point organizing space. Each represents a “world picture,” or a sort-of truth about the real world. Rotman describes how the evolution of photography to digital imaging inauthenticates the scene it produces. Digitization replaces the chemical fixation of light on film, which indicates the presence of the camera at the scene, with the ability to edit the scene without limit and without having been present at the time of the shooting. Such an image would be a “visual polyphony” serviced by the “now ubiquitous devices and apparatuses of visual parallelism which actively displace linear optic” (*Becoming* 98). Thus arbitrary, digitized data usurps the verisimilitude of the photograph. The virtual subject indicated by perspective lines and the camera (correlating to the written “I”) has disappeared, as well as the self-who-sees:

But digitization, substituting pixels for points, replaces the psychic architecture and ‘metaphysic of interiority’ of the Renaissance individual by an architecture that, because it must be specified in relation to the physiologically meaningful substrate of the pixilated image, cannot transcend the space it physically occupies, and so cannot enact a metaphysical drama of viewing the world from a position outside it. (97)

Digital imaging, like parallel computing, is able to represent multiple events simultaneously. It therefore defies the logic of the Heideggerian “world” grounded in temporality. The digital picture is not prior to existence but rather occasions it as a purely spatial encounter. Moreover, an “I” experientially appropriate to such a media must be a denaturing of the alphabetic “I” and accordingly reconfigure the “other” against which it is defined. Unknowing of its proper self or of its relation to the world, this “I” cannot enact the *subiectum*. It cannot produce a (digital) world picture like the world picture that Heidegger proposes, one

²⁰Heidegger could also be referring to pictures made by drawing or painting, which typically entail a system of perspective. The paper already discusses how this Renaissance-style picture requires an artist-who-draws/paints and incarnates its subject-observer (be it the artist or any viewer) as a visible object located in the invisible, unoccupiable vanishing point.

conceived by a human consciousness fashioned according to the technology of its time, be it text, chemical photograph, or perspective art.

The fact is that the contemporary para-human is moving away from words (especially poetry and literature) and into the nebulous domain of the after-picture, the image gone digital²¹: “A post-literate self is emerging, patterned not on the word – stable, integral, fixed, discrete, enclosing a unique, interior meaning, ordered, sequential – but on the fluid and unordered multiplicities of the visual image” (94–95). Such a self is made to navigate the infinite and invisible pathways of the worldwide web, to be “present” on numerous sites all overlapping on one computer screen, to be accessible, and to have available all lines of communication. Such a self might deprecate books as superannuated resources with a limited scope of information in favor of researching through web pages and reading electronic text. Such a self would prefer typing (quickly constructed and instantly transmitted) to writing (laboriously lettered and slowly circulated, if at all).

The after-picture offered by a digital image is far removed from the picture offered by a literary text. Essentially, it is not a “world” with any integrity. Without temporal process and without a direct human subject-agent, it represents but an instantaneous collectivity made not of continuous parts but of separate units. Like the interconnected communities of para-selves populating cyberspace, the digital image does not express a meaningful composition. It precludes the philosophy of Dasein (a temporal/serial state of becoming), which therefore disqualifies it from being a true work of art. While “the work of art exemplifies world entry – it brings the earth into the opening that is world and maintains this opening” (Cheah 129), the after-picture expresses unworlding, the closing of that original openness that incarnates subject and object in their nonsubjective and nonobjective transcendent forms into a set of pixilated points, individually finite but infinite in combinatory potential.

Network ability and digitization, involving virtual reality, may seem empowering, but actually threaten the value of the human subject-agent and the world picture of its *subiectum*. According to Heidegger’s discussion of the world picture, the digital image may be considered an instance of the *gigantic*, a phenomenon that implies quality in the guise of quantity. He warns that as soon as the enormous and extensive things

²¹*Digitalization* takes digitization a step further. Originally used just for business models, it now refers to the process of digitizing all things possible. Essentially, it is the integration of digital technologies into everyday life. Some examples include smart devices and smart city infrastructures. This paper does not comment on the particular consequences of digitalization but only mentions its rise in the contemporary world.

we tend to consider “great” actually become incalculable, the human agent loses the power of representation: “This becoming incalculable remains the invisible shadow that is cast around all things everywhere when man has been transformed into *subiectum* and the world into picture” (Age 135). This is not to say that we should avoid the clever innovations that may improve certain tasks or disavow the “selves” we have created on the World Wide Web, but we must remain diligent and judicious about the relationship they have to our essential Being. As Heidegger cautions of modern science: “Man will know [...] that which is incalculable, only in creative questioning and shaping out of the power of genuine reflection” (136). Only with active awareness and honest decision-making can we maintain any kind of authority over and authorship of our lives.

Should we allow ourselves to be seduced by the charms of speed, magnitude, and overabundance promised by digital media, we must expect alterations to our cognitive profile, as occurred during the transitions from gestures to speech and speech to writing. Should we abandon literature, face-to-face interaction, and the alphabet itself, we must be prepared to relinquish the *subiectum* that acts in ultimate freedom: the self-freeing from the bonds of subject and object that determine selfhood. Should we lose sight of the world picture, the “big picture,” the meaningful sum of all relational things, then we must resign ourselves to the unworlded blindness that prevents us from living and knowing the unconcealed truth of who we are in communion with others, of Being-in-the world as Dasein.



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